

**20W Single Output Industrial DIN Rail Power Supply (GDR-20)**



GDR-20...

**Feature**

- Universal AC input/Full range
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- Can be installed on DIN rail TS-35/7.5 or 15
- NEC class 2 / LPS compliant
- Built in DC OK active signal
- LED indicator for power on
- No load power consumption<0.75W
- 100% full load burn-in test
- 3 years warranty

**Notes:**

- All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.

- Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.

- Tolerance : includes set up tolerance, line regulation and load regulation.

- The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.

- Length of set up time is measured at cold first start. Turning ON/OFF the power supply may lead to increase of the set up time.

Model	GDR-20-5	GDR-20-12	GDR-20-15	GDR-20-24	
Output	DC Voltage	5V	12V	15V	24V
	Rated Current	3A	1.67A	1.34A	1A
	Current Range	0-3A	0-1.67A	0-1.34A	0-1A
	Rated Power	15W	20W	20W	24W
	Ripple & Noise	80mVp-p	120mVp-p	120mVp-p	150mVp-p
	DC Voltage Adj.Range	4.75-5.5V	10.8-13.2V	13.5-16.5V	21.6-26.4V
	Voltage Tolerance	±2.0%	±1.0%	±1.0%	±1.0%
	Line Regulation	±1.0%	±1.0%	±1.0%	±1.0%
	Load Regulation	±1.0%	±1.0%	±1.0%	±1.0%
	Setup, Rise Time	500ms, 30ms/230VAC 1000ms, 30ms/115VAC at full load			
Input	Hold Up Time (Typ.)	50ms/230VAC 120-370VDC			
	Voltage Range	85-264VAC 120-370VDC			
	Frequency range	47-63Hz			
	Efficiency	76%	80%	81%	84%
Protection	AC Current(Typ.)	0.55A/115VAC 0.35A/230VAC			
	Inrush current(Typ.)	Cold start 20A/115VAC 40A/230VAC			
	Over Load	105%-160% rated output power Protection type: Constant current limiting, recovers automatically after fault condition is removed			
Function	Over Voltage	5.75-6.75V	13.8-16.2V	17.25-20.25V	27.6-32.4V
	DC OK AC tive signal	3.75-6V/50mA	9-13.5V/40mA	11.5-16.5V/40mA	18-27V/20mA
Environment	Working temp.	-20~+70°C (Refer to output load derating curve)			
	Working humidity	20°C~90°C, RH non-condensing			
	Storage Temp & Humidity	-40°C~+85°C, 10%~95 %RH			
	Temp. coefficient	±0.03%/°C(0-55°C)			
	Vibration	Component:10-500Hz, 2G 10min./1cycle, 60min, each along X,Y,Z axes;Mounting:Compliance to IEC60068			
Safety & EMC	Safety standards	UL508, TUV EN60950-1 approved, NEC class 2 / LPS compliant			
	Withstand Voltage	I/P-O/P:3KVAC	I/P-FG:1.5KVAC	O/P-FG:0.5KVAC	
	Isolation resistance	I/P-O/P, I/P-FG, O/P-FG:100M Ohms/500VDC			
	EMI conduction	Compliance to EN55011,EN55022 (CISPR22), EN61204-3 Class B			
	Harmonic current	Compliance to EN61000-3-2,-3			
	EMS immunity	Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11, ENV50204, EN55024,EN61000-6-1,EN61204-3, light industry level, criteria A			
Others	Mibf	236.9k hrs min, MIL-HDBK-217F(25°C)			
	Dimension	22.5x90x100mm(WxHxD)			
	Packing	0.19kg; 72pcs/14.7kg/0.91cuff			

**Outline and dimension**

**Mechanical Specification**

**Derating Curve**

**Output Derating VS Input Voltage**

**Block Diagram**

**Application of DC OK Active Signal**